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| APPLICATION NO.   | FILING DATE      | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.     | CONFIRMATION NO. |
|---|------------------|----------------------|-------------------------|------------------|
| 09/957,022  | 09/21/2001       | Evelyn Boettcher     | P 0271811               | 4877             |
| 909 7   | 590 ' 04/23/2003 |                      |                         |                  |
| PILLSBURY WINTHROP, LLP<br>P.O. BOX 10500<br>MCLEAN, VA 22102 |                  |                      | EXAMINER                |                  |
|   |                  |                      | DUVERNE, JEAN F         |                  |
|   |                  |                      |                         |                  |
|   |                  |                      | 2839                    |                  |
|   |                  |                      | DATE MAILED: 04/23/2003 |                  |

Please find below and/or attached an Office communication concerning this application or proceeding.





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Office Action Summary

Application No. 09/957,022

Applicant(s)

Boettcher

Examiner

Jean Duverne

Art Unit 2839

| The MAILING DATE of this communication appears on the cover shee  | et with the correspondence address   |  |  |  |
|---|--|--|--|--|
| Period for Reply  |  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE THE MAILING DATE OF THIS COMMUNICATION.   |  |  |  |  |
| - Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no after SIX (6) MONTHS from the mailing date of this communication.   | event, however, may a reply be timely filed  |  |  |  |
| <ul> <li>If the period for reply specified above is less than thirty (30) days, a reply within the<br/>be considered timely.</li> </ul>   | statutory minimum of thirty (30) days will   |  |  |  |
| <ul> <li>If NO period for reply is specified above, the maximum statutory period will apply and<br/>communication.</li> </ul>   | d will expire SIX (6) MONTHS from the mailing date of thi  |  |  |  |
| <ul> <li>Failure to reply within the set or extended period for reply will, by statute, cause the</li> <li>Any reply received by the Office later than three months after the mailing date of this earned patent term adjustment. See 37 CFR 1.704(b).</li> </ul> | application to become ABANDONED (35 U.S.C. § 133). s communication, even if timely filed, may reduce any   |  |  |  |
| Status  |  |  |  |  |
| 1) Responsive to communication(s) filed on May 14, 2002   |  |  |  |  |
| 2a) ☐ This action is <b>FINAL</b> . 2b) ☑ This action is non-final.   |  |  |  |  |
| 3) Since this application is in condition for allowance except for formal closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935  | matters, prosecution as to the merits is 5 C.D. 11; 453 O.G. 213.  |  |  |  |
| Disposition of Claims   |  |  |  |  |
| 4) 💢 Claim(s) <u>1-19</u>   | is/are pending in the application.   |  |  |  |
| 4a) Of the above, claim(s)  | is/are withdrawn from consideration.   |  |  |  |
| 5) Claim(s)   | is/are allowed.  |  |  |  |
| 6) 💢 Claim(s) <u>1-4, 10-13, 15, 16, 18, and 19</u>   | is/are rejected  |  |  |  |
| 7) 💢 Claim(s) <u>5-9, 14, and 17</u>  | is/are objected to   |  |  |  |
| 8) Claims are so  | ubject to restriction and/or election requirement  |  |  |  |
| Application Papers  | · · · · · · · · · · · · · · · · · · ·  |  |  |  |
| 9) The specification is objected to by the Examiner.  |  |  |  |  |
| 10) ☐ The drawing(s) filed on is/are objected to by the   | ne Examiner.   |  |  |  |
| 11) The proposed drawing correction filed on is: a)   |  |  |  |  |
| 12) The oath or declaration is objected to by the Examiner.   | , and a second s |  |  |  |
| Priority under 35 U.S.C. § 119  | i  |  |  |  |
| 13) $\square$ Acknowledgement is made of a claim for foreign priority under 35 U  | .S.C. § 119(a)-(d).  |  |  |  |
| a) ☐ All b) ☐ Some* c) ☐ None of:   | -10, (0,   |  |  |  |
| 1.  Certified copies of the priority documents have been received.  |  |  |  |  |
| 2. Certified copies of the priority documents have been received in   | Application No.  |  |  |  |
| <ol> <li>Copies of the certified copies of the priority documents have be<br/>application from the International Bureau (PCT Rule 17.2</li> </ol>   | een received in this National Stage  |  |  |  |
| *See the attached detailed Office action for a list of the certified copies   |  |  |  |  |
| 14) Acknowledgement is made of a claim for domestic priority under 35   | U.S.C. § 119(e).   |  |  |  |
| ttachment(s)  |  |  |  |  |
|   | ary (PTO-413) Paper No(s)  |  |  |  |
| 6) Notice of Draftsperson's Patent Drawing Review (PTO-948)  19) Notice of Informal Patent Application (PTO-152)  7) Information Disclosure Statement(s) (PTO-1449) Paper No(s). 2  20) Other:  |  |  |  |  |
| 7) XI Information Disclosure Statement(s) (PTO-1449) Paper No(s). 20) Other:  |  |  |  |  |

Application/Control Number: 09/991,077

Art Unit: 2839

#### **DETAILED ACTION**

## Claim Rejections - 35 U.S.C. § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 1. Claims 1-4, 10-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jin et al (US patent 6,055,348).

In regard to claims 1-3, 10, Jin's device discloses a compliant support block at 16 having a longitudinal axis, a load receiving surface oriented substantially parallel to the longitudinal axis, the load receiving surface being suitable for receiving an applied load (14) disposed on the compliant support, a Bragg-grating (see col. 1, lines 29-65) disposed in the compliant support block and extending substantially along and an angle to longitudinal axis of the compliant support block; an optical multiplexer/demultiplexer in the optical communication with optical signal or signal transmission of the waveguide (see cols 8-9, lines 54-26). However, Jin's device fails to explicitly disclose the orthogonal direction of the applied load. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to use the orthogonal direction of the applied load instead of being parallel, since it has been held that rearranging parts of an invention involves only routine skill in the art. In re Japikse, 86 USPQ 70.

Application/Control Number: 09/991,077

Art Unit: 2839

In regard to claims 4, Jin's device discloses the aforementioned limitations, except for the use of aluminum material for the rigid bar. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to use of the aluminum material for the rigid, since it has been held been held to be within the general skill of a worker in the to select a known material on the basis of its suitability for the intended use as matter of obviousness to meet system design and requirement. In re Leshin, 125 USPQ 416.

Regarding claim 11, Jin's device discloses the aforementioned limitations, but fails to explicitly disclose the method of making tunable dispersion compensating device. However, the method of forming the device is germane to the issue of patentability of the device itself.

Therefore, this limitation has not been given patentable weight.

Claims 12-13, 15-16, 18-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jin et al (US patent 6,055,348) in view of Agano (US patent 6,327, 091).

Regarding claims 18-19, Jin's device discloses the aforementioned limitations, but fails to explicitly disclose the use of glass microspheres with the compliant support and polymer material. Agano's discloses the use of glass microspheres (24) with the compliant support and polymer material (see cols. 5-6). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to use of glass microspheres with the compliant support such as the one taught in Agano's structure for improving the signal and image transmission in Jin's device.

Application/Control Number: 09/991,077

Art Unit: 2839

Page 4

Regarding claims 12-13 and 15-16, Jin's device discloses the aforementioned limitations, but fails to explicitly disclose the method of making tunable dispersion compensating device.

However, the method of forming the device is germane to the issue of patentability of the device itself. Therefore, this limitation has not been given patentable weight.

#### Conclusion

# Allowable Subject Matter

- 2. Claims 5-9, 14, and 17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Prior art fails to disclose the plurality of microsphere located in the compliant support block between the rigid support bar and the Bragg-grating fiber in combination with the rest of the claim(s) limitations.
- 3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean Duverne whose telephone number is (703) 305 0297. The examiner can normally be reached from 8:30 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynn Feild, can be reached on (703)308-2710. The fax phone number for this Group is (703) 308 - 7722.

Art Unit: 2839

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0956.

JFD

April 20, 2003

Jean F. Buverne

Patent Examiner, Art Unit 2839